


05-90  
1007 # 8



ENTERED

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/082,747A

DATE: 09/27/2002

TIME: 13:08:18

Input Set : A:\476112USseqlist2.txt

Output Set: N:\CRF4\09272002\J082747A.raw

4 <110> APPLICANT: Genentech, Inc.  
5 Ballinger, Marcus D.  
6 Jones, Jennifer T.  
7 Fairbrother, Wayne J.  
8 Sliwkowski, Mark X.  
9 Wells, James A.  
12 <120> TITLE OF INVENTION: HEREGULIN VARIANTS  
15 <130> FILE REFERENCE: 402E-476112US  
17 <140> CURRENT APPLICATION NUMBER: US 10/082,747A  
C--> 18 <141> CURRENT FILING DATE: 2002-09-16  
20 <150> PRIOR APPLICATION NUMBER: US 09/101,544  
21 <151> PRIOR FILING DATE: 1998-07-17  
23 <150> PRIOR APPLICATION NUMBER: PCT/US/98/01579  
24 <151> PRIOR FILING DATE: 1998-02-10  
26 <150> PRIOR APPLICATION NUMBER: US 08/799,054  
27 <151> PRIOR FILING DATE: 1997-02-10  
29 <160> NUMBER OF SEQ ID NOS: 116  
31 <170> SOFTWARE: FastSEQ for Windows Version 3.0  
33 <210> SEQ ID NO: 1  
34 <211> LENGTH: 71  
35 <212> TYPE: PRT  
36 <213> ORGANISM: Homo sapiens  
38 <220> FEATURE:  
40 <400> SEQUENCE: 1  
41 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn  
42 1 5 10 15  
43 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr  
44 20 25 30  
45 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr  
46 35 40 45  
47 Val Met Ala Ser Phe Tyr Lys His Leu Gly Ile Glu Phe Met Glu Ala  
48 50 55 60  
49 Glu Glu Leu Tyr Gln Lys Arg  
50 65 70  
52 <210> SEQ ID NO: 2  
53 <211> LENGTH: 66  
54 <212> TYPE: PRT  
55 <213> ORGANISM: Homo sapiens  
57 <400> SEQUENCE: 2  
58 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn  
59 1 5 10 15  
60 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr  
61 20 25 30



## RAW SEQUENCE LISTING

DATE: 09/27/2002

PATENT APPLICATION: US/10/082,747A

TIME: 13:08:18

Input Set : A:\476112USseqlist2.txt

Output Set: N:\CRF4\09272002\J082747A.raw

62 Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn  
63 35 40 45  
64 Val Pro Met Lys Val Gln Asn Gln Glu Lys Ala Glu Glu Leu Tyr Gln  
65 50 55 60  
66 Lys Arg  
67 65

69 &lt;210&gt; SEQ ID NO: 3

70 &lt;211&gt; LENGTH: 63

71 &lt;212&gt; TYPE: PRT

72 &lt;213&gt; ORGANISM: Homo sapiens

74 &lt;400&gt; SEQUENCE: 3

75 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn  
76 1 5 10 15  
77 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr  
78 20 25 30  
79 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr  
80 35 40 45  
81 Val Met Ala Ser Phe Tyr Lys Ala Glu Glu Leu Tyr Gln Lys Arg  
82 50 55 60

84 &lt;210&gt; SEQ ID NO: 4

85 &lt;211&gt; LENGTH: 65

86 &lt;212&gt; TYPE: PRT

87 &lt;213&gt; ORGANISM: Homo sapiens

89 &lt;400&gt; SEQUENCE: 4

90 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn  
91 1 5 10 15  
92 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr  
93 20 25 30  
94 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr  
95 35 40 45  
96 Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro  
97 50 55 60

98 Glu

99 65

101 &lt;210&gt; SEQ ID NO: 5

102 &lt;211&gt; LENGTH: 66

103 &lt;212&gt; TYPE: PRT

104 &lt;213&gt; ORGANISM: Rattus rattus

106 &lt;400&gt; SEQUENCE: 5

107 Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn  
108 1 5 10 15  
109 Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr  
110 20 25 30  
111 Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn  
112 35 40 45  
113 Val Pro Met Lys Val Gln Thr Gln Glu Lys Ala Glu Glu Leu Tyr Gln  
114 50 55 60  
115 Lys Arg  
116 65



## RAW SEQUENCE LISTING

DATE: 09/27/2002

PATENT APPLICATION: US/10/082,747A

TIME: 13:08:18

Input Set : A:\476112USseqlist2.txt

Output Set: N:\CRF4\09272002\J082747A.raw

118 <210> SEQ ID NO: 6  
119 <211> LENGTH: 71  
120 <212> TYPE: PRT  
121 <213> ORGANISM: Rattus rattus  
123 <400> SEQUENCE: 6  
124 Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn  
125 1 5 10 15  
126 Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr  
127 20 25 30  
128 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr  
129 35 40 45  
130 Val Met Ala Ser Phe Tyr Lys His Leu Gly Ile Glu Phe Met Glu Ala  
131 50 55 60  
132 Glu Glu Leu Tyr Gln Lys Arg  
133 65 70  
135 <210> SEQ ID NO: 7  
136 <211> LENGTH: 63  
137 <212> TYPE: PRT  
138 <213> ORGANISM: Rattus rattus  
140 <400> SEQUENCE: 7  
141 Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn  
142 1 5 10 15  
143 Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr  
144 20 25 30  
145 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr  
146 35 40 45  
147 Val Met Ala Ser Phe Tyr Lys Ala Glu Glu Leu Tyr Gln Lys Arg  
148 50 55 60  
150 <210> SEQ ID NO: 8  
151 <211> LENGTH: 64  
152 <212> TYPE: PRT  
153 <213> ORGANISM: Rattus rattus  
155 <400> SEQUENCE: 8  
156 Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn  
157 1 5 10 15  
158 Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr  
159 20 25 30  
160 Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn  
161 35 40 45  
162 Val Pro Met Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro Glu  
163 50 55 60  
165 <210> SEQ ID NO: 9  
166 <211> LENGTH: 81  
167 <212> TYPE: PRT  
168 <213> ORGANISM: Rattus rattus  
170 <400> SEQUENCE: 9  
171 Ser His Leu Ile Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn  
172 1 5 10 15  
173 Gly Gly Glu Cys Phe Thr Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr



## RAW SEQUENCE LISTING

DATE: 09/27/2002

PATENT APPLICATION: US/10/082,747A

TIME: 13:08:18

Input Set : A:\476112USseqlist2.txt

Output Set: N:\CRF4\09272002\J082747A.raw

```
174          20          25          30
175 Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
176          35          40          45
177 Val Pro Met Phe Tyr Ser Met Thr Ser Arg Arg Lys Arg Gln Glu Thr
178          50          55          60
179 Glu Lys Pro Leu Glu Arg Lys Leu Phe His Ser Leu Val Lys Glu Ser
180 65          70          75          80
181 Lys
184 <210> SEQ ID NO: 10
185 <211> LENGTH: 65
186 <212> TYPE: PRT
187 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 10
190 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
191 1          5          10          15
192 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
193          20          25          30
194 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
195          35          40          45
196 Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro
197 50          55          60
198 Glu
199 65
201 <210> SEQ ID NO: 11
202 <211> LENGTH: 65
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo sapiens
206 <400> SEQUENCE: 11
207 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
208 1          5          10          15
209 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
210          20          25          30
211 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
212          35          40          45
213 Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro
214 50          55          60
215 Glu
216 65
218 <210> SEQ ID NO: 12
219 <211> LENGTH: 65
220 <212> TYPE: PRT
221 <213> ORGANISM: Homo sapiens
223 <400> SEQUENCE: 12
224 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
225 1          5          10          15
226 Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
227          20          25          30
228 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
229          35          40          45
```



## RAW SEQUENCE LISTING

DATE: 09/27/2002

PATENT APPLICATION: US/10/082,747A

TIME: 13:08:18

Input Set : A:\476112USseqlist2.txt

Output Set: N:\CRF4\09272002\J082747A.raw

230 Val Met Ala Ser Phe Tyr Ser Thr Ser Thr Pro Phe Leu Ser Leu Pro  
231 50 55 60  
232 Glu  
233 65  
235 <210> SEQ ID NO: 13  
236 <211> LENGTH: 71  
237 <212> TYPE: PRT  
238 <213> ORGANISM: Gallus domesticus  
240 <400> SEQUENCE: 13  
241 Ser His Leu Thr Lys Cys Asp Ile Lys Gln Lys Ala Phe Cys Val Asn  
242 1 5 10 15  
243 Gly Gly Glu Cys Tyr Met Val Lys Asp Leu Pro Asn Pro Pro Arg Tyr  
244 20 25 30  
245 Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr  
246 35 40 45  
247 Val Met Ala Ser Phe Tyr Lys His Leu Gly Ile Glu Phe Met Glu Ala  
248 50 55 60  
249 Glu Glu Leu Tyr Gln Lys Arg  
250 65 70  
252 <210> SEQ ID NO: 14  
253 <211> LENGTH: 49  
254 <212> TYPE: PRT  
255 <213> ORGANISM: Artificial Sequence  
257 <220> FEATURE:  
258 <223> OTHER INFORMATION: Variant of the human heregulin-betal EGF-like domain  
259 containing a deletion of human heregulin-betal residues  
260 202-204  
262 <400> SEQUENCE: 14  
263 Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn  
264 1 5 10 15  
265 Gly Gly Glu Cys Phe Met Val Lys Asp Pro Ser Arg Tyr Leu Cys Lys  
266 20 25 30  
267 Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr Val Met Ala  
268 35 40 45  
269 Ser  
272 <210> SEQ ID NO: 15  
273 <211> LENGTH: 48  
274 <212> TYPE: PRT  
275 <213> ORGANISM: Homo sapiens  
277 <400> SEQUENCE: 15  
278 Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His  
279 1 5 10 15  
280 Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn  
281 20 25 30  
282 Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Arg  
283 35 40 45  
285 <210> SEQ ID NO: 16  
286 <211> LENGTH: 49  
287 <212> TYPE: PRT



VERIFICATION SUMMARY

PATENT APPLICATION: US/10/082,747A

DATE: 09/27/2002

TIME: 13:08:19

Input Set : A:\476112USseqlist2.txt

Output Set: N:\CRF4\09272002\J082747A.raw

L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date